methods for scale-up. Using evidence from Nkwanta, national scale-up was launched in 2000 as a program of exchanges for district teams to work with Navrongo and Nkwanta implementers on designing pilot implementation of CHPS elsewhere in Ghana. **RESULTS:** This paper reviews operational determinants of this success and implications of the Upper East Region experience for efforts to develop evidence-based community health services elsewhere in Africa **CONCLUSIONS:** Although CHPS scale-up has been launched in all 170 districts, the Upper East Region remains its lead performing region, despite challenging economic, ecological, and social circumstances for health development.

PHP161

PHARMACOECONOMICS: NEED TO IMPLEMENT AS A TOOL FOR DRUG REIMBURSEMENT IN INDIA

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Health care is one of India's largest sectors. Private and Public sector spending in India is highly skewed towards the private sector accounting for nearly 80% of total health care spending in India. However, a major chunk is through out of pocket (OOP) expenditure whereas only 11% of population has health insurance. About 35% of population is covered by state or central health insurance schemes. The public health spending is comparatively low. As a percentage of GDP the public health spending has reduced from 1.3% in 1990 to 0.9%. The overall budget on drugs and medicines by both central and state governments is only a fraction of health sector expenditure. The state expenditure is also not uniform as some states are spending about 5% on medicines whereas other states are spending as high as 17% on medicines and drugs. Despite these disparities in drug and medicine spending among states in India, it is reported that public institutions spend inadequate in India. Though the government of India has ceiling on drug prices of about 76 drugs, many drugs are out of control and for same drug offered by different companies' different price exist. Due to differences in price of various brands of same molecule, access to health care is not uniform. This is an issue during reimbursement of drugs. Private health insurance companies do not have a list of medicines that would be reimbursed. Thus, private health insurance players reimburse different amount to different patients for same molecule with different brand names. If pharmacoeconomics is applied as a tool to identify the best treatment option, the burden on health care would reduce for all stakeholders including patients, insurance companies and the government.

PHP162

PATIENT SAFETY PROGRAMME IN KBK DISTRICTS OF ODISHA, INDIA

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ORGANIZATION: The Development for society (DFS) is an non Governmental organization working in undivided KBK districts of Odisha in the area of Health, Nutrition, WASH including quality assurance & patient safety in hospitals at community level. **OBJECTIVES:** Patient safety is the absence of preventable harm to a patient during the process of health care. The discipline of patient safety is the coordinated efforts to prevent harm, caused by the process of health care itself, from occurring to patients. The data on frequency and magnitude of avoidable adverse patient events in Odisha is not well known. The goal is to create a data base on frequency and magnitude of avoidable adverse patient safety events for further intervention to improve quality of care. **METHODS:** Surgical Safety; Hand Hygiene; Management of Medication and Patient communication. **RESULTS:** DFS in collaboration with Indian Confederation for Healthcare Accreditation and other partners like WHO, patients group, Ministry of Health would create data base on patient safety, spell out clear-cut patient safety standards, train employees of hospitals (Primary health centres) including doctors & paramedics, ASHA (accredited social health activist) at village level, local nursing homes and clinics in spotting medical errors and adverse reactions as well as encourage them to report the same in order to create a "desi" database and to take suitable mitigation measures. **CONCLUSION:** The Patient safety data created would help in designing the standards which would be implemented on pilot basis in KBK districts of Odisha with support from Ministry of Health, Government of Odisha & other development partners including patient groups which would help in improving the quality of care in the PHCs of this regions thereby improving the health care quality in the hospitals (PHCs) at community level.

DISEASE-SPECIFIC STUDIES

CARDIOVASCULAR DISORDERS – Clinical Outcomes Studies

PCV1

CARDIOVASCULAR SAFETY OF CONCURRENT USE OF ATYPICAL ANTIPSYCHOTIC AGENTS AND LONG ACTING STIMULANTS IN CHILDREN AND ADOLESCENTS DIAGNOSED WITH ATTENTION DEFICIT/HYPERACTIVITY DISORDER

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OBJECTIVES: The study examined cardiovascular safety of concurrent atypical antipsychotic agents and long acting stimulants (LAS) use in children and adolescents with Attention Deficit/Hyperactivity Disorder (ADHD). **METHODS:** The study involved retrospective longitudinal analysis of 2003-2007 Medicaid Analytical eXtract (MAX) data of four US states. The cohort involved children and adolescents aged 6 to 17 years who initiated treatment with LAS for ADHD. The continuous eligibility 6 months before and 12 months after the index LAS date was ensured for the study cohort. Atypical antipsychotic use was identified after the initiation of the index LAS and classified as current use (days of active use), former use (days after current use), and nonuse (time before the first use including the follow up of those who never exposed to atypicals). The study end point was defined as the first inpatient or outpatient claim due to cardiovascular event. The risk for cardiovascular event was evaluated using time dependent Cox regression analysis. **RESULTS:** All the study participants were followed for 9,206,873 person-days of observation period. The numbers of cardiac events were 840, 202, and 45 during periods of atypical non-use, current use, and former use respectively. After controlling for demographic, service related, and clinical characteristics, the study found that current users and former users of atypical antipsychotics were not associated with cardiovascular events compared to no atypical users (Current use: HR, 1.17, 95% CI, 0.98-1.40; Former use: HR, 1.24; 95% CI, 0.91-1.69). However, patient characteristics like diagnosis of obesity and diabetes, and use of mood stabilizers increased the risk of cardiovascular events. **CONCLUSIONS:** The study did not find any increased cardiovascular risk with addition of the atypical antipsychotics to long acting stimulant regimen in children and adolescents diagnosed with ADHD.

PCV2

SHORT-TERM CLINICAL AND ECONOMIC CONSEQUENCES OF CORONARY STENT THROMBOSIS

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OBJECTIVES: To conduct a systematic review and meta-analysis to better quantify the real-world incidence of in-hospital or 30-day death or myocardial infarction (MI) following coronary stent thrombosis (ST), as well as ST-related treatment costs. **METHODS:** We searched Medline, Embase and Scopus from January 2000 to July 2012 to identify observational or registry studies that evaluated a cohort of ≥25 patients experiencing angiographically-confirmed thrombosis of a drug-eluting or bare-metal stent, required the use of dual-antiplatelet therapy for guideline recommended durations, and reported on the incidence of in-hospital or 30-day death or MI and/or ST-related treatment costs. Incidences and treatment costs from each study were pooled using random-effects meta-analysis. Statistical heterogeneity was assessed using the I^2statistic (>50% deemed significant). **RESULTS:** A total of 23 studies were included. Among the 12 studies (N=8,832 STs) reporting in-hospital mortality, the pooled incidence rate was estimated to be 7.9%, 95%CI=5.4%-11.3%, I^2=86%. Ten studies (N=1,294 STs) reported 30-day death, with a pooled incidence of 11.6%, 95%CI=8.8%-15.1%, I^2=55%. Subgroup analysis suggested patients experiencing early ST (within 30-days of implant) had higher in-hospital and 30-day mortality than those experiencing very-late ST (interaction p<0.04 for both). Stent type (bare-metal vs. drug-eluting) had no significant effect on in-hospital or 30-day mortality (interaction p>0.22 for both). In the 5 studies (N=542 STs) and 3 studies (N=180 STs) reporting in-hospital and 30-day MI, respectively, the pooled incidence rates were 6.1%, 95%CI=2.1%-16.2%, I^2=88% and 9.5%, 95%CI=3.8%-22.0%, I^2=65%. Only one study reported costs associated with ST, estimating the median/patient cost of hospitalization to treat early ST at $11,134 (in 2000US$). **CONCLUSIONS:** Regardless of stent type used, the short-term clinical and economic consequences of coronary stent thrombosis (ST) appear significant. While stent type does not seem to affect the incidence of post-ST outcomes, an earlier occurrence of ST may be associated with higher mortality.

PCV3

RELATIONSHIP BETWEEN MAJOR BLEEDING AND CONCURRENT USE OF ANTIPLATELET DRUGS WITH CHINESE MEDICATIONS

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OBJECTIVES: While patients use Chinese medications (CM) concurrently with Western medications are common in Taiwan, the use of CM products with antiplatelet agents might increase the bleeding risks. The objective of this research was to explore the impact of major bleeding risk due to concurrent use of antiplatelet drugs with CMs (American ginseng, Asian ginseng, danshen, and dong quai). **METHODS:** A nested case-control and case-crossover study using the 2007 National Health Insurance Research Databases in Taiwan was conducted. All outpatients who used aspirin, clopidogrel, dipyridamole, or ticlopidine continuously were included in the cohort. Those antiplatelet users hospitalized for major bleeding were in case group and the corresponding control group was randomly matched base on the propensity score. The case periods in case-crossover study were defined as 1-14 days before hospitalization and 15-28 days or 71-84 days before hospitalization were control periods. The conditional logistic regression analyses were performed to determine the associations between major bleeding and exposure to interactions between antiplatelets and specific CM. **RESULTS:** Of the 92,046 antiplatelet users as the cohort, 1,095 patients (1.19%) were identified as cases and 887 patients were included in the case-crossover study. Concurrent use of antiplatelet drugs with specific single CM showed an increased risk of hospitalization due to major bleeding in both studies but was not statistically significant. Antiplatelet drugs users were 28% to 152% more risk of major bleeding among those who used Asian ginseng or danshen currently than others. **CONCLUSIONS:** Relationship between major bleeding and concurrent use of antiplatelet drugs with CM was not ascertained. The adverse clinical outcomes due to concomitant use warrant further investigation.